

Yufan CAI

National University of Singapore, Singapore

Email: cai_yufan@u.nus.edu

EDUCATION

Ph.D., Computer Science

National University of Singapore, Singapore

2020.08 – 2024.08

B.Eng., Computer Science

Shanghai Jiao Tong University, Shanghai, China

2016.09 – 2020.06

RESEARCH EXPERIENCES

Formal Method and Trustworthy AI | PLSE@NUS lab | 2020.08 – present

Supervisor: Jin Song Dong

Natural Language Computing Team | Microsoft Research Asia | Internship | 2020.01 – 2020.04

Chatbot | National University of Singapore | Internship | 2019.07 – 2019.09

Supervisor: See-Kiong Ng

PUBLICATIONS

- Yufan Cai, Zhe Hou, David Miguel Sanan Baena, Xiaokun Luan, Yun Lin, Jun Sun, Jin Song Dong. Automated Program Refinement with Code Large Language Models (POPL 2025)
- Chenyan Liu*, Yufan Cai*, Yun Lin, Yuhuan Huang, Yunrui Pei, Bo Jiang, Ping Yang, Jin Song Dong, and Hong Mei. CoEdPilot: Recommending Code Edits with Learned Prior Edit Relevance, Project-wise Awareness, and Interactive Nature (ISSTA 2024)
- Yufan Cai, Yun Lin, Chenyan Liu, Jinglian Wu, Yifan Zhang, Yiming Liu, Yeyun Gong, Jin Song Dong. On-the-Fly Adapting Code Summarization on Trainable Cost-Effective Language Models (NeurIPS 2023)

SERVICE

- Reviewer at the thirty-eighth Annual Conference on Neural Information Processing Systems (NeurIPS), 2025
- Reviewer at International Conference on Learning Representations (ICLR)
- Reviewer at Formal Aspects of Computing, Soft Computing
- PC Member at the twenty-eighth IEEE Pacific Rim International Symposium on Dependable Computing
- PC Member at the 1st International Sports Analytics Conference and Exhibition
- External Reviewer at ICSE, FSE, ASE, ISSTA, NeurIPS, AAAI, ICML, WWW, NFM, ATVA

SELECTED AWARDS

- President's Graduate Fellowship, NUS, 2024
- Research Achievement Award, NUS, 2023
- NUS-ISEP Scholarship, NUS, 2020
- Shanghai Outstanding Graduates, 2020
- Huichuan Scholarship, SJTU & Huichuan, 2019
- Huawei Scholarship, SJTU & Huawei, 2018
- Meritorious Award, Mathematical Contest in Modeling, 2017

PROJECT EXPERIENCES

- Prediction of Postoperative Complications and Readmission Risks Using Explainable Machine Learning with A/P Loh Ne- Hooi Will (National University Hospital, Singapore)
- Legal LLMs with Formal Methods for Infocomm Media Development Authority (IMDA, Singapore)

LEADERSHIP

Shanghai Jiao Tong Volunteer Union | Director

2017.04 – 2018.08